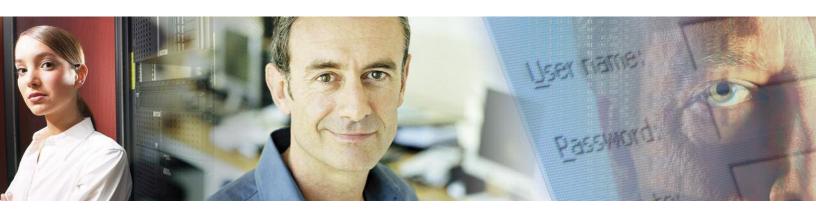
Alcatel-Lucent VPN Firewall Portfolio



Protect your network with innovative security solutions. Optimize IT staff time and effort while minimizing total cost of ownership.

Benefits

- Deploy robust security safeguards enterprise-wide
- Implement large-scale VPN support with high-performance packet processing
- Streamline firewall deployment, configuration and management
- Leverage high-availability bandwidth management for consistent service quality
- Secure your VoIP and Next-Generation multimedia applications
- Sustain business continuity with carrier-class reliability and availability
- Keep total ownership costs low



Complete, cost-effective solutions for network security, VPN, service-quality assurance and more

The *Alcatel-Lucent VPN Firewall* portfolio offers a broad range of enterprise and carrier-class security solutions to protect corporate and service provider networks delivering mission-critical IP applications to headquarter employees, branch offices, trading partners, road warriors and customers.

Alcatel-Lucent VPN Firewall solutions can help stretch IT budgets with superb price/performance and low total ownership costs. Leading-edge technology with timesaving, work-saving features help maximize IT staff resources. And ample flexibility, availability and scalability can simplify deployment and management of diverse applications including:

- Advanced security services
- VPN services for site-to-site and remote access
- Bandwidth management capabilities
- Secure data center Web and application hosting
- Storage network secure solution
- Mobile data security
- Packet Data Gateway and Packet Data Interworking Functions for Dual-Mode Wireless/WiFi VPN and VoIP/Data Security

The *Alcatel-Lucent VPN Firewall* Portfolio forms a unique 3-tier security architecture and includes:

- VPN Firewall Brick® platforms Security appliances that integrate application layer inspection, firewall functionality with advanced VPN capabilities for smalloffice through data-center requirements
- Alcatel-Lucent Security Management Server (SMS) Software for robust, tightly synchronized firewall, VPN, service quality, VLAN and virtual firewall policy management.

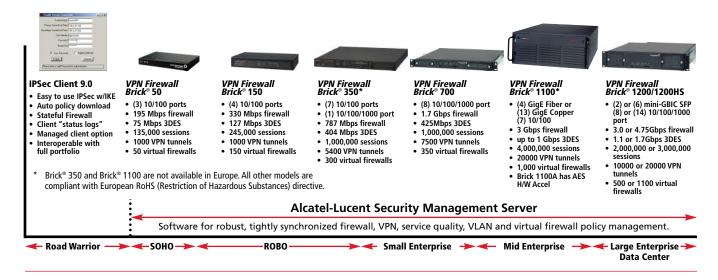
 Alcatel-Lucent IPSec Client – Software that provides secure remote access VPN services for mobile workforce and telecommuters.

Deploy robust security safeguards network-wide

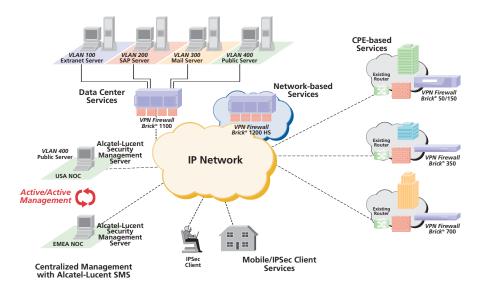
VPN Firewall Brick® platforms are built as security-specific devices. In contrast to traditional router-based systems, they operate as intrinsically secure Ethernet-layer bridges that are virtually invisible to hackers scanning your network. Completely segregated from the routing process, these security appliances are not vulnerable to dynamic routing protocol attacks. In many instances, they are undetectable by any device not on the same network segment, protecting enterprises with a high level of stealth security.

Reinforcing this depth of defense is the platforms' innovative, Bell Labs-developed operating system, a compact real-time kernel designed exclusively for security. Far less easily compromised than general-purpose operating systems running on server platforms, this exceptionally thin system virtually eliminates all points of vulnerability. As a result, *VPN Firewall Brick*® platforms have no security-threatening back doors (no telnet, ftp, HTTP or other insecure access method can be used to compromise the configuration of these security devices) and can only be accessed by a secure, encrypted management channel from the Alcatel-Lucent SMS software.

Alcatel-Lucent SMS software adds exposure-limiting safeguards including strong IP-specific denial-of-service attack protection, premium firewall and VPN authentication services, application-layer defense and content-level security including command blocking, URL blocking and virus scanning.



VPN Firewall Brick® platforms deliver bullet-proof security and comprehensive, high-performance VPN capabilities for enterprise environments ranging from small offices to large data centers.



The Alcatel-Lucent VPN Firewall portfolio offers flexible deployment options to suit enterprise network strategies and users' diverse needs.

Implement large-scale VPN support with high-performance packet processing

VPN Firewall Brick® platforms deliver the performance needed to provide vital security and VPN services for thousands of enterprise users. High-capacity packet-processing capabilities help maximize user efficiency and productivity with up to 1.7 Gbps VPN throughput and a full 4.75 Gbps firewall throughput.

Portfolio-wide scalability helps protect expanding user populations cost effectively. A single *VPN Firewall Brick*® unit can support up to 4 million simultaneous sessions and over 20,000 simultaneous VPN tunnels. Its highly efficient operating system contributes to these outstanding processing capabilities by freeing memory for session and policy management.

Streamline firewall deployment, configuration and management

VPN Firewall Brick® platforms can be installed and working at any network location. These flexible bridging firewalls work as quickly as a physical connection can be made. There's no need to resegment the network, worry about downtime during network conversion to the new topology or wait as hosts are directed to a new gateway. Alcatel-Lucent SMS software delivers:

- Sophisticated IP services management capabilities with low operating costs to manage security, not individual devices – easy security deployment, management and maintenance with centrally controlled VPN Firewall Brick® clients
- Scalability to rapidly provision and manage up to 20,000 VPN Firewall Brick® platforms and 500,000 IPSec Client users from one console – fewer devices to maintain and fewer people to maintain them

- Seamless integration of firewall, VPN, bandwidth management, virtual LAN (VLAN) and virtual firewall policy management – centralized realtime monitoring, robust logging and customized reporting capabilities
- Integrated Denial of Service protections, Intrusion Detection/Prevention facilities and Bell Labs-developed Intelligent Cache Management capabilities maximizes uptime and mitigates impacts of network attacks

Leverage high-availability bandwidth management for consistent service quality

VPN Firewall Brick® platforms can increase both network security and quality of service through uniquely granular bandwidth management. They incorporate – at no extra charge – robust implementation of class-based queuing (CBQ) technology for committed-rate bandwidth control and traffic prioritization. Bandwidth limits to help defend against flood attacks, and bandwidth guarantees to enhance end-user experiences, are enforced at the server and user levels. Traffic can be classified by physical interface, virtual firewall, policy rule and session, enabling simplified yet precisely targeted security implementations.

Sustain business continuity with carrier-class reliability and availability

A high-availability architecture is built into every component of the *Alcatel-Lucent VPN Firewall* portfolio. There is no single point of failure solution-wide. All *VPN Firewall Brick*® models support native subsecond failover to a standby unit. In an outage, services continue uninterrupted. Out-of-band management capabilities help ensure continued service even if communications are lost due to a network outage. For added reliability, Alcatel-Lucent SMS software can be distributed across multiple geographically dispersed operations centers for active/active network redundancy. This enables immediate disaster recovery in the event of a catastrophe at the primary management location.

Keep your total ownership costs low

VPN Firewall solutions efficiently address the need to contain operations outlays, make efficient use of inhouse technical expertise and protect network investments. All solution components are built to interoperate smoothly with existing infrastructure elements. Introducing them requires no costly network retrofits.

VPN Firewall Brick® products help cut IT staff hours and shorten time-to-service with its full-featured bridging support. And because it doesn't run on a general-purpose operating system, it eliminates the high costs and time-intensive efforts associated with OS upgrades and patches.

The performance-proven Alcatel-Lucent SMS security management solution offers one simple, economical licensing structure – without costly additional modules or recurring license fees. Its high-capacity processing and high-device-count management capabilities help minimize additional capital-equipment purchases.

And its comprehensive security safeguards dramatically reduce network vulnerabilities that consume IT staff time and budget.

Alcatel-Lucent VPN Firewall Portfolio

- Simplified management unique client/server design; centralized staging, real-time monitoring and no-touch management of all VPN, security and service-quality assurance capabilities via scalable, proven Lucent SMS
- Full-featured bridging enables stealthy, depth-of defense security that conventional router-based firewalls cannot match
- Advanced security safeguards denial-of-service attack protection; high-speed content security; premium authentication services; with no occurrences of reported advisories or vulnerabilities and no backdoors.
- Uniquely granular bandwidth management maximize service quality via flexible class-based queuing (CBQ) technology, server-level and user-level limits and guarantees
- Carrier-grade reliability native high-availability architecture with no single point of failure
- Rules Based Routing Routes all packets matching the rule to a proxy server, router or other device utilizing third party software to perform content filtering functions such as command blocking, URL filtering and virus scanning. Allows transparent interaction with any third party equipment.
- High-performance packet processing supports up to 4 million simultaneous sessions, 1100 virtual firewalls, 20,000 VPN tunnels
- **Ultra-thin, highly secure operating system** virtually impenetrable to hacker attacks; frees memory for packet processing, policy management
- Virtual firewall and VLAN support easily assign and enforce security policies for diverse user groups
- **Plug-and-play deployment** implement secure mission critical applications without costly, time-intensive network reconfiguration
- Low ownership costs no ongoing feature-licensing expenses; easy installation, management and upgrades save IT staff time and effort; high-performance, high capacity features reduce the need to purchase additional equipment

To learn more about our comprehensive portfolio, contact your Alcatel-Lucent sales representative, authorized reseller or sales agent.

You can also visit our web site at www.alcatel-lucent.com.

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